

비스테로이드성 항염증 약물의 임상적 이용

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Clinical Use of Non-Steroidal Anti-Inflammatory Drugs

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prostaglandin

7)

aspirin (aspirin - like drugs), (analgesic - antipyretics), (non - steroidal anti - inflammatory drugs : NSAIDs) (non - narcotic analgesic)

cyclooxygenase prostaglandin synthase (chemotactic agent) leukotriene lipooxygenase

가

1)

Alzheimer 가 Aspirin prostaglandin

2 - 6)

aspirin prostaglandin

staglandin pirin 가

Aspirin, Vane Botting prostaglandin aspirin indomethacin prostaglandin

(set point)가

Aspirin prostaglandin

prostaglandin

PGE₂가
 PGE₂ catecholamine 가
 prostaglandin kinin, histamine, PAF
 5-HT 가
 Aspirin prostaglandin
 Cyclooxygenase
 aglandin , aspirin
 cyclooxygenase
 (Fig. 1). Aspirin cyclooxygenase 가
 , aspirin
 가
 Cyclooxygenase 가
 cyclooxygenase - 1(COX - 1)
 cyclooxygenase - 2(COX - 2)
 가 . COX - 1 ,
 가 . COX - 2 din
 COX - 2
 Aspirin
 COX - 1 COX - 2
 COX - 2
 pirin indomethacin COX - 1
 , ibuprofen propionic acid
 diclofenac COX - 1 COX - 2
 aspirin indomethacin
 COX - 2
 COX - 2 specific inhibitor가
 COX - 1 etodolac
 nabumetone ,
 prostaglan-

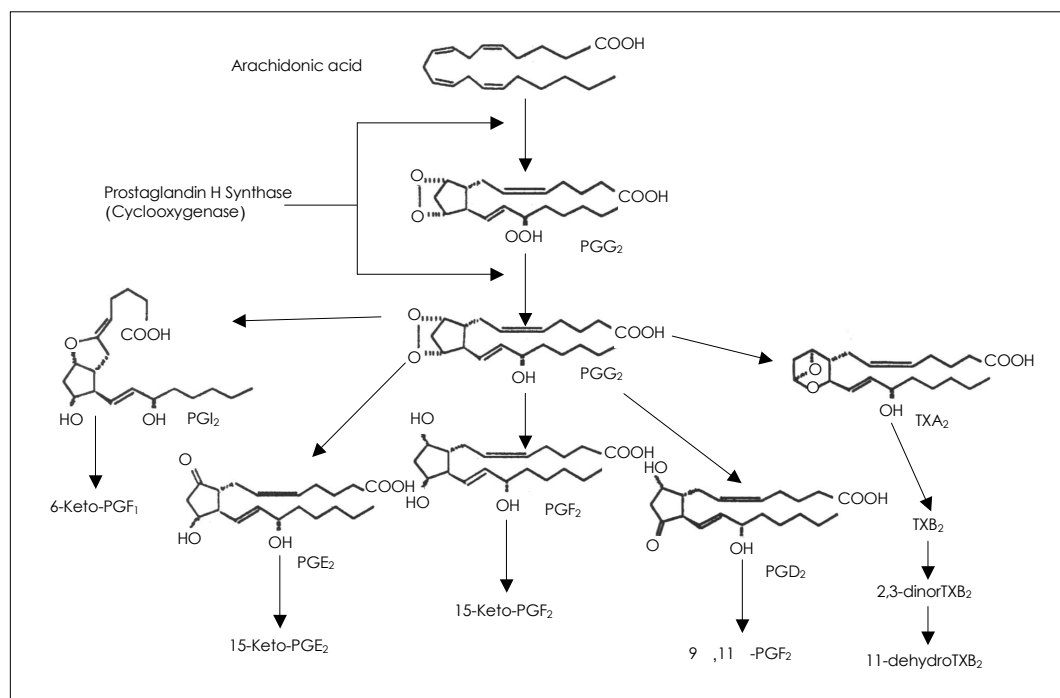


Fig. 1. Biosynthesis of eicosanoids.

norepinephrine angiotensin

.¹²⁾

prostaglandin 가

(papillary necrosis) 가

(interstitial nephritis) 가

가 (酸) (back diffusion)

가 , prostaglan-

. Phenacetin din(PGI2 PGE2) .

¹³⁾¹⁴⁾ prostaglandins 가

Table 1

Table 1. 비스테로이드성 항염증 약물의 약리학적 특성 및 용량

()					(1 , mg × 1)
Salicylate 유도체					
Aspirin	0.25	+	+	+	300~1000 × 3~6
Sodium salicylate	2~12	+	+	+	300~1000 × 3~6
Diflunisal	8~12	+	-	+	250~1000 × 3~6
Salsalate	12	+	+	+	2000~4000 × 2
Pyrazolon 유도체					
Phenylbutazone	50~65	±	+	++	100 × 3~4
Oxyphenbutazone					100 × 3~4
Apazone	14				400 × 3
Para-aminophenol 유도체					
Acetaminophen	2	+	+	-	325~650 × 3~6
Indomethacin 및 Sulindac					
Indomethacin	3	+	+	++	50 × 2
Sulindac	7		+	+	100~200 × 2
Fenamate 유도체					
Mefenamic acid	2	+	+	±	250~500 × 3
Meclofenamate sodium	2	+	+	+	100 × 3
Tolmetin	5				25~50 × 3
Propionic acid 유도체					
Ibuprofen	2	+	+	+	400 × 3~4
Naproxen	14	+	+	+	250 × 2~3
Ketoprofen	2	+	+	+	25~50 × 3~4
Fenoprofen	3	+	+	+	300~600 × 3~4
Flurbiprofen	6	+	+	+	50~100 × 3
Fenbufen	10	+	+	-	300 × 2~3
Benoxaprofen					400~800 × 1
Phenylacetic acid 유도체					
Diclofenac	1~2	+	+	++	25~50 × 3
Alclofenac		+	+	+	250~500 × 3~4
Piroxicam	50	+	+	++	20 × 1~4

prostaglandin	lipoxxygenase	TXA2	20)21)
가		Salicylic acid	
	15)16)		10~20%(in colloidon)
thromboxane A2(TXA2)			
가	aspirin	Salicylate	
cyclooxygenase	cyclooxy-	(10~30 g)	
genase			
		salicylate	가 22)
		salicylism	
		가	
Salicylate			
	aspirin		
		(febrile disease)	salicylate
			(encephalopathy) 23)
		가	
325~650 mg	4	가	
			가
	(exudative inflamma-	Salicylate	5%
tion)		(hepatomegaly)	
		2	salicylate
(granulomatous inflammation)			Reye
(scar formation)	가		24)25) Reye
salicylate가			salicylate
		Aspirin	
	salicylate(5~6g)	aspirin	cyclooxygenase가
Sulfasalazine	salicylate	TXA2	
2	aspirin		
		prothrombin	, vitamin K
aspirin	TXA2	(hemophilia)	
		aspirin	
		0.65g	aspirin 4~7
		2	가
	40~325 mg		aspirin
가	aspirin		1
PGI2			
TXA2	17 - 19)		
	(preeclampsia)	Pyrazolon	
	60~100 mg	Phenylbutazone, oxyphenbutazone, antipyrine, ami-	
		nopyrine apazone	가
PGI2			

Phenylbutazone					
Phenylbutazone	salicylate	Acetaminophen	,	,	,
cylate	가 (agranulocytosis)	가	325~1000 mg		4000 mg
	1		40~480 mg	, 24	5
(ankylosing spondylitis)					
phenylbutazone	가	Indomethacin, Sulindac	Etodolac		
가	10~45%	Indomethacin			
10~15%	가	Indomethacin	가 aspirin		
			salicylate		
			Indomethacin		
					90%
Apazone(Azapropazone)		가			
Aspirin	pyrazolon	가	(35~50%)		
phenylbutazone					
가					
Para - aminophenol		Hodgkin			
		25 mg	2~3		
Acetaminophen(Paracetamol)		25 mg	50 mg		150~200 mg
Phenacetin	acetaminophen	aspirin			
가					
	phenacetin	Sulindac			
	, acetaminophen	phenacetin	indomethacin		
			indomethacin		Su-
Phenacetin	acetanilid	acetaminophen	lindac		
phen	prostaglandin	Acetamino-	sulfide	cyclooxygenase.	
				90%가	
			indomethacin		
	acetaminophen		(10%)		가
가			가		
	(pancytopenia)				
	가	26 - 28)	Sulindac	150~200 mg	
				400 mg	
Acetaminophen					
(hypoglycemic coma)가		As-	Etodolac		
pirin			Cyclooxygenase		가

가	가	가	가
가	PGE2	가	가
Etodolac	200~400 mg	Tolmetin soldium	400 mg 3
	가		2 g
Fenamate		Ketorolac	
N - Phenylthranilic acid	mefenamic, me-	Ketorolac	가 ,
clofenamic, flufenamic, tolfenamic	etofenamic acid	가	Ketorolac
Fenamate			30~
가	prostaglandin	50	4~6
가	Fenamate	Ketorolac	
가	Meclofenamate가	Ketorolac	5~30
50%가	가	mg	30~90 mg
(25%)			
Fenamate		Propionic acid	
가	가	Propionic acid	ibuprofen naproxen,
가	가	fenoprofen, ketoprofen, flubiprofen, oxaprozin	
	가	fenbufen, carprofen, pirpro-	
	(soft tissue)	fen, indobufen, tiaprofenic acid	
		Propionic acid	as-
		pirin	
Mefenamic acid	500 mg,	가	
250 mg	6	가	
clofenamate sodium	200~400 mg 2~3		(erosion)
		aspirin	
Tolmetin	Ketorolac	prostaglandin	na-
		proxen aspirin cyclooxygenase	20
Tolmetin		ibuprofen, fenoprofen aspirin	
Tolmetin		Propionic acid	
	가	naproxen	
	20~60	propionic acid	
5	99%가	furosemide	
25~40%			

				Piroxicam													
				oxcam													
				가 aspirin	indomethacin	napro-											
Ibuprofen				xen	가												
Ibuprofen	1200~1800 mg				Prostaglandin												
		1	3,200	indomethacin													
mg				Piroxicam													
400 mg	4~6				20%	5%											
				가 가													
Naproxen				1%	Aspirin	piro-											
Naproxen	250~500 mg	2		xicam													
Fenoprofen																	
fenoprofen calcium	200~600 mg	3~4															
				Piroxicam	20 mg												
				7~12													
Diclofenac				2													
Diclofenac				가 Pheny-													
lacetic acid				Cyclooxygenase	Nabumetone												
indomethacin	naproxen			Diclofe-	Nabumetone	cylooxygenase - 2											
nac	arachidonate																
				Diclofenac													
				2~3													
				29)30)	Nabumetone												
20%																	
가				transaminase	가												
				가													
Diclofenac sodium	1	150~200 mg	2~4														
				COX - 2													
Oxicam				COX - 2	가	가											
Oxicam	piroxicam			celecoxib, rofecoxib													
				COX - 2	가	8 - 11)											
				가													
가	cyclooxygenase - 1																
				, cyclooxygenase - 2													
				meloxicam													
				tenoxicam, ampiroxicam, droxicam,													
piroxicam, cinnoxicam	sudoxicam			가													

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